there is no significant association between DID and the proportion of resistant pathogens (p = 0.14), but a significant association between DID and the incidence density of HAIs (p = 0.015).

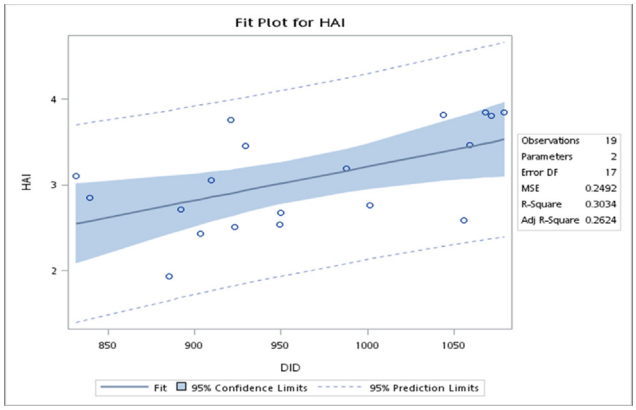

Figure: Linear regression analysis for antimicrobial DDD/1000 inpatient-days and incidence density of healthcare-associated infections.

Conclusions: Implementation of ASP showed rapid impacts on antibiotic consumption, and the associated decrease of HAI, whether long-term effects sustained deserved closely monitoring.

PS 2-324

FALSE POSITIVE VENEREAL DISEASE RESEARCH LABORATORY OF CEREBROSPINAL FLUID

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Purpose: Venereal disease research laboratory (VDRL) test is a nontreponemal test, used for screening of syphilis. Cerebrospinal fluid (CSF) VDRL test is very specific for neurosyphilis, but its sensitivity is low. Neurosyphilis needed to be excluded in patients with unexplained dementia and psychosis. False positive VRDL of CSF was found in clinical practice and we aim to evaluate the features.
Methods: We retrospectively reviewed all adult patients received CSF VDRL examination in a tertiary hospital in Taiwan from January 2011 to December 2012. The CSF VDRL test positive without positive result of serum VDRL and Treponema pallidum hemaglutination assay (TPHA) test was defined as false positive CSF VDRL.
Results: During the study period, total 494 patients received CSF VDRL examination. Among them, five patients had positive CSF VDRL. One patient met the diagnosis of neurosyphilis, and the other four had false positive CSF VDRL. All of the four patients had lung adenocarcinoma with suspicious of meningeal carcinomatosis. Forty-five patients in this study have active malignancy, and meningeal carcinomatosis was suspected in ten of them.

Table: The characteristic of patients with false positive of CSF VRDL (PS 2-324).

Case	Age /gender	Data of CSF study				TMN stage
		Cell count (/cumm) (PMN/mono%)	Sugar (mg/dL) (CSF/serum)	Protein (mg/dl)	Cytology	
1	68 Female	32(0/100)	34/121	78	Positive	T1bN3M1b
2	66 Female	23(11/89)	58/131	88	Suspicious	cT4N0M1a
3	63 Male	6(0/100)	56/179	32	Suspicious	T4N3M1
4	54 Male	12(0/100)	31/184	74	Suspicious	T4N1M1

Conclusion
Although CSF VDRL has high specificity and rare false positive, the diagnosis of neurosyphilis still needs to correlate with clinical feature. Meningeal carcinomatosis should be considered for false-positive CSF VDRL, especial in patient with lung adenocarcinoma.

PS 2-325

IMPACT OF INTERFERON GAMMA-INDUCED PROTEIN 10 FOR THE ACCURACY OF TUBERCULOSIS DIAGNOSIS

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Purpose: It is crucial for early diagnosis and treatment of TB. However, diverse clinical presentations combined with paucibacillary infection, making bacteriological confirmation for TB diagnosis challenging. Number of studies consider Interferon gamma-induced protein 10 (IP-10) to be a marker for the diagnosis of TB, but conflicting results have been reported and the exact role of IP-10 remains unclear. Here we evaluate the diagnostic accuracy of IP-10 for TB.
Methods: Acquiring systematic review (SR) of studies with reference standard and blinding is prior for diagnostic questions. "IP-10 AND tuberculosis" were used as keywords to search prefiltered Cochrane Library and then, unfiltered PubMed database. One latest published (2014) relevant SR and Meta-Analysis (14 case-control studies, 2075 cases were included) was chosen for critical appraisal : The quality of studies was evaluated using the Quality Assessment for Studies of Diagnostic Accuracy (QUADAS) tool. TB culture or smear was used as gold standard. The causes of high heterogeneity (I^2 for sensitivity 88.7% and specificity 92.9%) were explored and the possible reasons included different cutoff values, different specimen and selected bias. Besides, in Deeks' funnel plot asymmetry test, p value of 0.17, suggesting no publication bias.
Results: IP-10 in the diagnosis of TB was: sensitivity 0.73 (95% CI, 0.71—0.76), specificity 0.83 (95% CI, 0.81—0.86), positive likelihood ratio 7.08 (95% CI, 3.94—12.72), negative likelihood ratio 0.26 (95% CI, 0.20—0.35), diagnostic odds ratio 29.50 (95% CI, 14.43—60.30), and the AUC was 0.88.
Conclusions: IP-10 may improve the accuracy of TB diagnosis. IP-10 can increase diagnostic accuracy when combined with other tests while the results of IP-10 assays should be interpreted in parallel with conventional test results and other clinical findings.

PS 2-326

COMPARISON OF THREE SELECTIVE AGAR MEDIA FOR THE DETECTION MULTIPLE DRUG RESISTANT *ACINETOBACTER* (MDRA)

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Purpose: *Acinetobacter baumannii* is commonly implicated in hospital-acquired infections. Multiple drug resistant Acinetobacter (MDRA), defined as co-resistant to all commonly prescribed antibiotics and poses a serious challenge. Without reliable screening, effective infection control is impossible. We evaluated the performance of three MDRA selective agars: (1) modified-Leeds Acinetobacter Medium (m-LAM), which is LAM agar modified by adding 8 mcg/ml imipenem and 2 mcg/ml amphotericin B; (2) MDR Acinebobacter Medium (Hardy diagnostics), and; (3) CHROMagar MDR Acinetobacter (CHROMagar).
Methods
In part 1, we challenged the Hardy and CHROMagar with 52 confirmed MDRA isolates previously picked up by LAM agar, and seven ATCC strains as negative controls. In part 2, we prospectively challenged the three agars with 40 clinical specimens: Throat swab (n = 15), Tracheal aspirate (n = 14), urine (n = 6), sputum (n = 4), and rectal swab (n = 1). All the agar plates were incubated in 35 ± 2 °C for 48 hours before regarding as

Results: For part 1, both HARDY and CHROMagar were 100% sensitive and 100% specific for the 59 strains tested. For part 2: Out of the 40 specimens, 6 MDRA were detected: 4 by all the agars, 1 picked up by Hardy alone (non-MDRA *acinetobacter* by the others), 1 picked by both CHROMagar and Hardy (non-MDRA *acinetobacter* by m-LAM). Upon re-examination, multiple colonies with different susceptibility profile were found on the agars. Discrepancy was likely due to chance of picking the resistant colonies. For the 34 non-MDRA specimens, follow up tests were required in 6 when using m-LAM, 13 when using Hardy, and 5 when using CHROMagar.

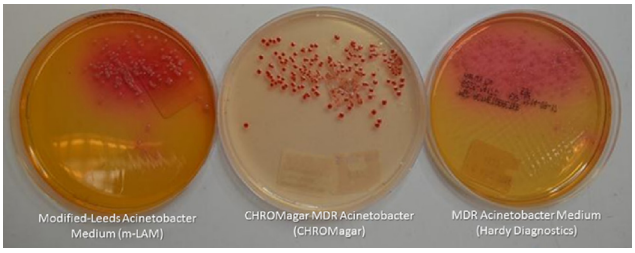

Figure. Appearances of MDRA in the three tested MDRA selective agars.

Conclusions: The three tested selective agar media have good sensitivity and specificity for detecting MDRA. Each has its own advantage and disadvantage and the choice should be made by individual laboratories.

PS 2-327

EPIDEMIOLOGY OF CANDIDEMIA IN A MEDICAL CENTER IN MIDDLE TAIWAN

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Purpose: Opportunistic pathogens such as yeast infections caused by Candida bacteremia (Candidemia),Clinical morbidity and mortality is still an important reason.This experiment was collected from 2009 to 2012 in Taiwan Medical Center clinical laboratory data were retrospective study of patients with candidemia.
Methods: To test the disk colorimetric microdilution,Configure the appropriate dilution test disc antibiotics and coloring indicator,After the addition of non-critical liquid yeast culture,In manual interpretation manner lowest antifungal concentration observed inhibition of microbial growth, fungal drug susceptibility testing operation,Understanding of the distribution and drug susceptibility against fungal change clinical pathogenic yeast.
Results
Candida albicans accounted for 45.2%, *Candida tropicalis* 22.3%, *Candida glabrata* 21.8%, *Candida parapsilosis* 8.5%, *Candida krusei* 1.1% and 1% other.Gender distinction, men 63.3%, women 36.7%.To distinguish between age 0 to 20 years old 4.3%, 5.9% from 21 to 40 years old, 41 to 60 years 19.7% 47.9% 61 to 80 years, 22.3 percent of 81 to 100 years old.In 2009 and 2012 isolates, a total of 188 cases of patients with candidemia in this study.
Conclusions: The experiments showed that the most frequently isolated remains *C.albicans*,Others in sequence for *C.tropicalis*, *C.glabrata*, *C.parapsilosis* and *C.krusei* ... etc.Amphotericin B, Posaconazole drug susceptibility testing,CLSI M27-S3 No interpretation no breakpoint therefore to represent. Anidulafungin, Micafungin this experiment *Candida spp*.Are all Susceptible.*C.glabrata*, *C.tropicalis* drugs Susceptible lower. Necessary with focus on prompt identification of patients at risk for candidemia due to resistant strains and the effect of appropriate antifungal therapy on mortality.

PS 2-328

THE MANAGERIAL EXPERIENCE OF REUSE OF SINGLE-USE MEDICAL DEVICES

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Purpose: To develop audit procedure and administration policy for reuse of single-use medical devices so that the introduction of these devices into clinical practices can be regulated to prevent increasing risk of infection due to inappropriate reuse of these devices on patients.
Material and methodology:

1. Resource management department receives the application from the "team for incoming new medical materials" and reminds the applicants of clinical units to complete the application via electronic administration system with attachment of the "audit form for resuse of single-use medical devices" approved by the IPC center.
2. The single-use medical devices can be reused only after the application is approved by the IPC center and co-signed by the associated committees.
3. All units stipulate the items and management policy of reusable single-use devices.
4. The clinical units record and report defective rate and expired rate of reusable single-use medical devices quarterly; and count the number of reused single-use medical devices, document the identification and tracking of exposed patients and perform testing for reusable medical devices monthly.
5. After comparison to the data between infection control information system and laboratory information system, the medical technologist of IPC center inform the physicians and clinical units about suspected cases.
6. The IPC center irregularly check the management policy of reusable medical devices in each unit.
7. The annular check report of reused medical devices from IPC center will be feedback to each unit

Results: Quality management index:1. The monthly associated complication rate of reusable medical devices2. The qualified rate of reusable medical devices3. The quarterly defective rate of reusable medical devices
Keywords::Reuse of single-use medical devices

PS 2-329

EFFICIENT ENVIRONMENT SURVEILLANCE CULTURE MONITORING ACTIVITIES WITH DEVELOPING COMPUTER PROGRAM

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Purpose: In the field of infection control, it is important to maintain and disinfect a clean environment as much as hand hygiene because spreading of bacteria is mainly through polluted surface or medical instruments. Some department conducts test for environment surveillance cultures regularly. This test should be well-organized, qualified, and revised every year. In order to manage scattered items of all departments efficiently, infection control team is in charge of developing 'environment surveillance culture' computation program.
Methods:
1. The overview of Environment Surveillance Culture computation program

(1) Registration of common items for 'environment surveillance cultures'
(2) Request and enrollment of examinations from each department through program, without submitting cooperation document
(3) Registration to Department of Laboratory Medicine
(4) Laboratory Medicine specialists confirm the result and attach comment.
(5) The department registered items check the result.

2. Education and promotion of use of the program
3. Evaluate the necessity of test and confirm the results.
4. The important notice is uploaded to intra-office network page.
5. Establish documented method of environmental surveillance culture.
6. Through the program, it is easy to request tests, see the results, and simplify the procedure.
Results:
1. Infection Control Team generalizes all procedures and coordinates each department.
2. Set the test date by using program and the lab manage possible dates for high-efficiency.
3. By posting the result of working place safety result to intra-office network page.